

ABSTRACT

An electronic alternating-current regulator for supplying a high-voltage direct current for activating a discharging light tube for steady illumination comprises a power circuit, a voltage control circuit, an activation circuit and a load circuit. The voltage control circuit utilizes effects of a power factor rectification integrated circuit and a transistor to control a direct-current voltage. An over-voltage / leakage protection circuit is connected in parallel between the voltage control circuit and the activation circuit, and is for activating a PNP transistor connected between a base end of a first transistor and a bi-directional thyristor, thereby serving as a protection switch over operations of the activation circuit. Accordingly, an alternating current ranging from 95V to 265V can be applied to a power input end while over-voltage / leakage protection effects are offered.